

## ABSTRACT

A structure and method of connecting a plurality of PSC-I beams (PSC-I beams) to each other using steel brackets. The beam connecting structure, each having a sheath pipe therein, includes an end plate which is mounted on each of both ends of each of the PSC-I beams, with a through hole provided on an upper portion of the end plate to correspond to the sheath pipe embedded in each of the PSC-I beams; a steel bracket integrally which is provided on the end plate to be perpendicular to the end plate; a bracket coupling plate to integrally couple the aligned steel brackets to each other; a bottom connecting plate which is provided on lower ends of the aligned steel brackets to connect the steel brackets to each other; a connecting sheath pipe which is provided between the PSC-I beams so that both ends of the connecting sheath pipe are respectively inserted into the through holes of the neighboring end plates of the PSC-I beams while the PSC-I beams are arranged linearly; a prestress strand which is inserted in the sheath pipes of the PSC-I beams and the connecting sheath pipe; and a concrete part which is filled in a space between the PSC-I beams to embed the aligned steel brackets, the bracket coupling plate and the connecting sheath pipe in the concrete part.